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Art Unit 2193
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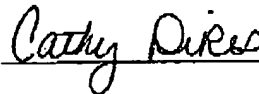
SUBJECT: Application Number 09/966,802
Inventor(s) Arthur Sheiman et al.
Date Filed 9/28/2001
Docket Number 42.P10700
Title Time Varying Filter With Zero And/Or Pole Migration

INCLUDED IN THIS TRANSMISSION:

| | |
|-----------------|---------|
| Fax Cover Sheet | 1 page |
| Transmittal | 1 page |
| Reply Brief | 7 pages |

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**TRANSMITTAL
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Total Number of Pages in This Submission

9

Application Number

09/666,802

Filing Date

September 28, 2001

First Named Inventor

Arthur Sheiman

Art Unit

2193

Examiner Name

D. Matzahn

Attorney Docket Number

42.P10700

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Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



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Drawing(s)



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Date

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PATENT
Attorney Docket No. 42.P10700

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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JAN 03 2006

In re Patent Application of)
Arthur Sheiman et al.) Group Art Unit: 2193
Application No.: 09/966,802) Examiner: D. Malzahn
Filed: September 28, 2001)
For: TIME VARYING FILTER WITH ZERO AND/OR)
POLE MIGRATION)

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants submit herewith a Reply Brief as required by 37 C.F.R. § 41.41. This Reply Brief is timely, because two months from mailing date of the Examiner's Answer, January 2, 2006, fell on a Federal Holiday.

For ease of reference, the Argument section below is organized similarly to the Argument section in the earlier-filed Appeal Brief.

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| By: <u>Cathy Dikes</u> Cathy Dikes | Date: <u>January 3, 2006</u> |

I. ARGUMENT:A. Claims 1, 7, 13, and 19-22 are patentable under 35 U.S.C. § 102(b) over Sakata et al.

The attempt at factual backfilling on pages 3 and 4 of the Examiner's Answer is insufficient. The only new citations to Sakata et al. appear to identify filter 108 and the process of changing its cutoff frequencies *fc*. What the Examiner has not provided is *any evidence or teaching* from Sakata et al. that anticipates the claimed invention. Rather, he continues with a logical construction (see Examiner's Answer, page 4, lines 1-9) that ignores the meaning of the claim terms, the teachings of Sakata et al., or both.

Because a rejection under 35 U.S.C. § 102(b) may not properly be based on such a logical construct, a *prima facie* case of anticipation still has not been established for claims 1, 7, 13, and 19-22.

1. Claims 1 and 19:a. Disengaging a filter not disclosed:

Appellants have explained in the Appeal Brief and in earlier responses that the claim term "disengaging" is defined in the specification to mean changing a filter *to* a neutralized or ineffective state.

Rather than identifying a neutralized or ineffective filter in Sakata et al., the Examiner logically fabricates both a "first filter" and a "second filter" from filter 108. There are two main problems with such an interpretation.

First, and most importantly, Sakata et al. fails to disclose that filter 108 is, at any time and regardless of its cutoff point, in a neutralized or ineffective state. No evidence from Sakata et al.

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has been provided that filter 108 is ever in a neutralized or ineffective state. Hence, Sakata et al. fails to disclose “disengaging” filter 108 as required by claims 1 and 19.

Second, even if the Examiner’s fabrication of first and second filters were proper, changing the cutoff frequency of filter 108 does not neutralize or render effective (i.e., disengage) the earlier-in-time filter, because of unchanged frequency response over at least some frequencies. See page 4 of the Appeal Brief for a more detailed explanation of why Sakata et al. fails to disclose disengaging filter 108 even under a first filter/second filter interpretation.

Because Sakata et al. fails to disclose the “disengaging” claim language of claims 1 and 19, the § 102(b) rejection of claims 1 and 19 should be reversed.

b. Disengaging a filter at the end of the segment not disclosed:

Page 4, lines 1 and 2, of the Examiner’s answer alleges that “one or more samples may be considered a segment of a signal.” No evidence has been provided that Sakata et al. discloses or teaches this.

Page 4, lines 5 and 6, of the Examiner’s answer alleges that “when the set of coefficients defined by $fc2$ have become effective . . . defines the end of the segment.” No evidence has been provided that Sakata et al. discloses or teaches this, either. Quite the contrary, Sakata et al. fails to disclose segments or disengaging filters at the end of them.

Because no evidence has been provided that Sakata et al. discloses disengaging a filter in a sequence of graduated steps “at the end of the segment,” and because the Examiner’s interpretation would effectively read this phrase out of the claim entirely, the § 102(b) rejection of claims 1 and 19 should be reversed.

2. Claims 7 and 20:

a. Engaging a filter not disclosed:

Appellants have explained in the Appeal Brief and in earlier responses that the claim term “engaging” is defined in the specification to mean changing a filter *from* a neutralized or ineffective state.

Sakata et al. fails to disclose that filter 108 is, at any time and regardless of its cutoff point, in a neutralized or ineffective state. In fact, all that Sakata et al. discloses in Fig. 7 is that filter 180 changes from one operational or “on” state to another operational or “on” state.

Nor does the mere change to a new cutoff frequency $fc2$ plainly does not mean that the earlier filter 108 with a cutoff frequency $fc1$ was in a neutralized or ineffective state.

Because Sakata et al. fails to disclose the “engaging” claim language of claims 7 and 20, the § 102(b) rejection of claims 1 and 19 should be reversed.

b. Engaging a filter at the beginning of a signal segment not disclosed:

Page 4, lines 11-13, of the Examiner’s Answer alleges that “changing the cutoff frequency from $fc1$ to $fc2$. . . results in the engaging the filter defined by $fc2$ at a sample in the INPUT signal which defined the beginning of the segment.” While the Examiner may find it convenient to define the claimed “beginning of a signal segment” as the sample in the INPUT signal at which the new cutoff frequency $fc2$ is reached, Sakata et al. simply does not disclose such a segment beginning. It is Sakata et al., and not the Examiner, which must disclose all claim limitations for anticipation.

Because no evidence has been provided that Sakata et al. discloses disengaging a filter in a sequence of graduated steps "at the beginning of a signal segment," the § 102(b) rejection of claims 7 and 20 should be reversed.

3. Claim 13:

In addition to the reasons given above in sections I(A)(1) and I(A)(2), claim 13 is allowable for the following reasons.

a. Engaging, filtering, and disengaging a filter not disclosed:

No evidence was provided in the Final Office Action that Sakata et al. discloses *both* engaging a filter in a sequence of graduated steps "at the beginning of a signal segment" *and* disengaging the filter in a sequence of graduated steps "at the end of a signal segment," as required by claim 13.

The Examiner's Answer fails to cure this deficiency. At page 4, lines 14 and 15, the Examiner's Answer states that "Claims 13 and 19-21 may be read on Sakata in a manner similar to claims 1 and 7 as detailed above." This conclusory statement fails to either read such claims on Sakata et al. or provide the lacking evidence.

The § 102(b) rejection of claim 13 should be reversed for lack of evidence of the claimed limitations in Sakata et al.

4. Claim 21:

In addition to the reasons given above in sections I(A)(1) and I(A)(2), claim 21 is allowable for the following reasons.

a. Disengaging then engaging a filter not disclosed:

No evidence was provided in the Final Office Action that Sakata et al. discloses *both* disengaging a filter in a sequence of graduated steps "at the end of the segment," *and* engaging a

filter in a sequence of graduated steps "at the beginning of the next segment," as required by claim 21.

The Examiner's Answer fails to cure this deficiency. At page 4, lines 14 and 15, the Examiner's Answer states that "Claims 13 and 19-21 may be read on Sakata in a manner similar to claims 1 and 7 as detailed above." This conclusory statement fails to either read such claims on Sakata et al. or provide the lacking evidence.

The § 102(b) rejection of claim 21 should also be reversed for lack of evidence of the claimed limitations in Sakata et al.

5. Claim 22:

a. Inaudibly switching filter on and/or off not disclosed:

Filter 300 in Sakata et al. is disclosed as being operational at different points with different filter coefficients (see col. 14, lines 16-20). Such disclosure does not meet the plain meaning of "switching one or more filters . . . off" as set forth in claim 22, because there is no disclosure that either set of filter coefficients causes the filter to be switched "off." The Examiner's Answer does not directly address this argument from the Appeal Brief.

Regarding the "inaudibly" limitation of claim 22, the mere citation to a problem with the prior art (i.e., noise) in col. 1, lines 33-40, does not "imply" (as alleged in the Examiner's Answer) anything about the disclosed invention in Sakata et al. The solution taught in Sakata et al. could, for example, avoid noise, but still be audible. This is particularly so, when one considers that the purpose of changing the coefficients of filter 108 is to change the *volume* of a signal. See col. 8, lines 20-25 and col. 9, lines 44-55.

For the reasons set forth above, Appellants respectfully solicit the Honorable Board to reverse the Examiner's rejection of claims 1, 7, 13, and 19-22.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: January 3, 2006



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